

SYSTEM AND METHOD FOR ELECTROSURGICAL TISSUE CANALIZATION

ABSTRACT OF THE DISCLOSURE

5 A method for transmyocardial revascularization of
the heart of a patient includes positioning an active
electrode surface in close proximity to a target site on the
wall of a patient's heart, and applying high frequency voltage
10 between the active voltage surface and a return electrode to
ablate tissue at the heart wall. The high frequency voltage
ablates, i.e. volumetrically removes the heart tissue, and the
electrode surface is axially translated into the space vacated
by the removed tissue to bore a channel through the heart
15 tissue. The active electrode surface may be introduced into
the thoracic cavity and placed adjacent the epicardium to form
an inward channel toward the ventricular cavity, or it may be
delivered into the ventricular cavity of the heart and
positioned adjacent the endocardium to form a channel
20 extending outward towards the epicardium. In either case, the
channels formed through the myocardium promote direct
communication between blood within the ventricular cavity and
that of existing myocardial vasculature to increase blood flow
to the heart tissue.